

**CLASSIFICATION AND CORRELATION
OF
THE SOILS OF**

**WELLS COUNTY
INDIANA**

FEBRUARY 1988



LOCATION

**U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
MIDWEST NATIONAL TECHNICAL CENTER
LINCOLN, NEBRASKA**

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Midwest National Technical Center
Lincoln, Nebraska 68508-3866

Classification and Correlation
of the Soils of
Wells County, Indiana

The final correlation of Wells County Soil Survey was held in Lincoln, Nebraska, the week of May 11, 1987. Those participating by correspondence were William D. Hosteter, soil specialist and Steve R. Base, soil correlator. The data reviewed consisted of the manuscript, SOI-6 files, field sheets, laboratory data, and the field correlation. Steve R. Base attended the comprehensive field review the week of October 6, 1986.

Headnote for Detailed Soil Survey Legend:

Map symbols consist of a combination of letters or of letters and numbers. The first capital letter is the initial one of the map unit name. The lowercase letter that follows separates map units having names that begin with the same letter, except that it does not separate sloping or eroded phases. The second capital letter indicates the class of slope. Symbols without a slope letter are for nearly level soils or miscellaneous areas. A final number of 2 indicates that the soil is moderately eroded and a number 3 indicates that the soil is severely eroded.

SOIL CORRELATION OF
WELLS COUNTY, INDIANA
FEBRUARY 1988

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
An, Am, Ac, Ah	Armiesburg silty clay loam, frequently flooded	An	Armiesburg silty clay loam, frequently flooded
BaaV, BaAV, MdAV <i>MdV</i>	Belmore Variant silt loam, 0 to 2 percent slopes, frequently flooded	BdA	Belmore Variant loam, 0 to 2 percent slopes, frequently flooded
BcB, AkB, AkB2, BcB2, DeB, DeB2, ApB2	Blount-Del Rey silt loams, 1 to 4 percent slopes	BkB2	Blount-Del Rey silt loams, 1 to 4 percent slopes, eroded
Po, MG, WH, FD <i>Mg Wh</i>	Pewamo silt loam, overwash	Co	Coesse silt loam
DeA, AkA, BcA, ApA	Del Rey-Blount silt loams, 0 to 1 percent slopes	DeA	Del Rey-Blount silt loams, 0 to 1 percent slopes
Ss, HoA, OgA	Sleeth silt loam	DkA	Digby silt loam, 0 to 2 percent slopes
Ee, Ed	Eel silt loam, frequently flooded	Ee	Eel silt loam, frequently flooded
EoA, FoA, OcA, EoAv, OsA	Eldean loam, 0 to 2 percent slopes	EoA	Eldean loam, 0 to 2 percent slopes
EoB2, FoB2, OcB2, OsB, EoB, <u>BaB2</u>	Eldean loam, 2 to 6 percent slopes, eroded	EoB2	Eldean loam, 2 to 6 percent slopes, eroded
EpC3, FoC2, FpC3, KsC, MdC2, MdD2, OsC, BaC2, BrD, BrC, BaC, FoC3, KmC, KsD	Eldean loam, 6 to 12 percent slopes, severely eroded	EpC3	Eldean gravelly clay loam, 6 to 12 percent slopes, severely eroded

WELLS COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
BAB2, BbB2, KmB, KsB, BrA, BrB, OsBV, <u>BaB2</u> , BaB	Belmore loam, 2 to 6 percent slopes, eroded	EsB2	Eldean Variant silt loam, 2 to 6 percent slopes, eroded
GnB2	Glynwood silt loam, 2 to 5 percent slopes, eroded	GnB2	Glynwood silt loam, 2 to 5 percent slopes, eroded
GpB3, MxB3, GsB3	Glynwood clay loam, 2 to 6 percent slopes, severely eroded	GpB3	Glynwood clay loam, 2 to 6 percent slopes, severely eroded
GnA, SgA	Glynwood silt loam, 0 to 2 percent slopes	GtA	Glynwood Variant silt loam, 0 to 2 percent slopes
BaA, BbA, HaA, KmA, KsA	Belmore loam, 0 to 2 percent slopes	HaA	Haney silt loam, 0 to 2 percent slopes
HbA, HbB2	Haskins loam, 0 to 2 percent slopes	HbA	Haskins Variant loam, 0 to 2 percent slopes
Mm, Fe, Ms	Milford silty clay loam	Mh	Milford silty clay loam
Le, Pd, Pe2?	Lenawee silty clay loam	Mk	Milford silty clay loam, stratified sandy substratum
Mn, Wt	Millgrove silty clay loam	Mn	Millgrove clay loam
Mo	Millsdale silty clay loam	Mo	Millsdale silty clay loam
MsA, MsB2	Milton silt loam, 0 to 2 percent slopes	MsA	Milton Variant silt loam, 0 to 2 percent slopes
SgB2, SgB, SbB2	Saylesville loam, 6 to 12 percent slopes, eroded	MuB2	Morley loam, moderately slow perm, 2 to 5 percent slopes, eroded

WELLS COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
MxD3, MvD2, HeG, HeG , HeE, MvE2, MvD, MuE2, <u>Mu2</u> ?	Morley clay loam, 12 to 18 percent slopes, severely eroded	MuE	Morley loam, 15 to 30 percent slopes
MvB2, MvC2, MvC	Morley silt loam, 4 to 8 percent slopes, eroded	MvC2	Morley silt loam, 4 to 8 percent slopes, eroded
MxC3	Morley clay loam, 6 to 12 percent slopes, severely eroded	MxC3	Morley clay loam, 6 to 12 percent slopes, severely eroded
Fg, F ^h _h	Fella silty clay loam, till substratum	Fg	Fella silty clay loam, till substratum
Fk	Fella mucky silty clay loam	Fk	Fella mucky silty clay loam, sandy substratum
Fm	Fewamo silty clay loam	Fm	Fewamo silty clay loam
Fy	Pits, quarry	Fy	Pits, quarry
RdA	Randolph silt loam, 0 to 2 percent slopes	RdA	Randolph silt loam, 0 to 2 percent slopes
RoB2, RoB, RoA, RcB	Rawson loam, 2 to 6 percent slopes, eroded	RIB	Rawson Variant fine sandy loam, 2 to 6 percent slopes
RoC2, RoC, RcC	Rawson loam, 6 to 12 percent slopes, eroded	R IB C	Rawson Variant fine sandy loam, 6 to 12 percent slopes
Rs, Re	Rensselaer loam	Rr	Rensselaer loam
Rz, Gc, Ge, Ry	Ross silt loam, frequently flooded	Rz	Ross loam, frequently flooded

WELLS COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Sd, Se	Saranac silty clay loam, frequently flooded	Se	Saranac silty clay loam, frequently flooded
Sp, So	Shoals silt loam, frequently flooded	Sp	Shoals loam, frequently flooded
Sv, St	Sloan silty clay loam, frequently flooded	Sv	Sloan silty clay loam, frequently flooded
TuB2, TrA, TrB, TuA, MfA, MfB, MfB2, MdB2, MdA, TrB2, MdB, TuB	Tuscola silt loam, till substratum, 2 to 6 percent slopes, eroded	TuB2	Tuscola loam, loamy substratum, 1 to 6 percent slopes, eroded
Ud, Or, Ps	Udorthents, loamy	Ud	Udorthents, loamy
Wa, Wd , Mz Hx	Wallkill silt loam	Wa	Wallkill silt loam, coprogenous earth substratum, drained
Hw, Hx Mz Wc, Wd	Houghton muck, undrained	Wd	Wallkill silt loam, undrained
WsA, WSAV s	Whitaker silt loam, 0 to 2 percent slopes	WsA	Whitaker silt loam, 0 to 2 percent slopes
W	Water	W	Water

Series Established by this Correlation:

None

Series Dropped or Made Inactive:

None

Certification Statement:

State Soil Scientist verifies that:

1. Mapping was completed December 30, 1986.
2. The general soil map for general planning has been joined with Allen County (correlated in 1965) on the north; Grant County (correlated in 1985) on the west; Blackford and Jay Counties (correlated in 1983) on the south; and Adams County (correlated in 1983) on the east. The names of some map units have some differences because of changes in concept, design of map units, newly established series, and proportions of soils within the mapping units. A detailed account of the joins is on file at the Indianapolis State Office. The detailed maps have been joined with surrounding counties. A detailed account of the joins is on file at the state office.
3. Interpretations have been coordinated.
4. Typical pedons are in soil areas using the map unit name. The legal descriptions of the location of the typical pedons are correct.

Verification of Exact Cooperator Names:

The following will be on the front of the publication:

United States Department of Agriculture
Soil Conservation Service
In cooperation with
Purdue University
Agricultural Experiment Station
and
Indiana Department of Natural Resources
State Soil Conservation Board and
Division of Soil Conservation

The citation in the box on the inside of the front cover will read: "This survey was made cooperatively by the Soil Conservation Service, Purdue University Agricultural Experiment Station, and the Indiana Department of Natural Resources, State Soil Conservation Board, and Division of Soil Conservation. It is part of the technical assistance furnished to the Wells County Soil and Water Conservation District. Financial assistance was made available by the Wells County Board of County Commissioners."

Disposition of Original Atlas Field Sheets:

The original atlas field sheets for Wells County will be retained by the Indiana State Office, and will be used in the map compilation and finishing procedures. Copies have been made for fire protection purposes. The state office at Indianapolis will prepare the atlas sheets for publication by April 1, 1988.

Prior Soil Survey Publications:

The first soil survey of Wells County was made in 1915 (Soil Survey of Wells County, Indiana, W.E. Thorp, U.S. Department of Agriculture and W.E. Wiley, Indiana Department of Geology. 25 pp., illust., 1915). This survey updates the first survey and provides additional information and larger maps that show the soil in greater detail.

Instructions for Map Finishing:

The conventional and special symbols used in this survey are listed on the attached SCS-37A. These are the only symbols that will be shown on the published maps. The maps will be finished using the "Guide for Soil Map Finishing," July 1976.

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

Soil Survey Area: Wells County
State: Indiana

Date: 3/86

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
CULTURAL FEATURES		CULTURAL FEATURES (cont.)		SPECIAL SYMBOLS FOR SOIL SURVEY	
BOUNDARIES		MISCELLANEOUS CULTURAL FEATURES		SOIL DELINEATIONS AND SOIL SYMBOLS	
County or parish		Permitted, house (only in urban areas)	o	ESCARPMENTS	
Minor civil division		Church	⊞	Other than bedrock (points down slope)	
Reservations (national forest or park, state forest or park, and large airport)		School	⊞	SHORT STEEP SLOPE	
Limit of soil survey (label)		Wells, oil or gas		MISCELLANEOUS	
Field sheet matching & meeting				Gravelly spot	
AD HOC BOUNDARY (label)				Sandy spot	
Small airport, airfield, park, airfield, cemetery, or flood pool				Severely eroded spot	
STATE COORDINATE TICK 1890 000 FEET		WATER FEATURES		RECOMMENDED AD HOC SOIL SYMBOLS	
LAND DIVISION CORNERS (sections and land grants)		DRAINAGE		Landfill	
ROADS		Perennial, double line		Disturbed area	
Divided (median shown if scale permits)		Perennial, single line		Wet spot	
County, town or reach		Intermittent		Very poorly drained areas < 2 acres in size that have wetland vegetation	
ROAD SIGNS & DESIGNATIONS		Drainage end			
Interstate		Canals or ditches			
Federal					
State		Drainage end/or irrigation			
RAILROAD		LAKES, PONDS AND RESERVOIRS			
		Perennial			
		Intermittent			
		MISCELLANEOUS WATER FEATURES			
		Marsh or swamp			
DAMS					
Large (to scale)					
Medium or small					
PITS					
Gravel pit					
Mine or quarry					

SOIL SURVEY WELLS COUNTY, INDIANA

PRIME FARMLAND

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
An	Armysburg silty clay loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
BdA	Belmore Variant loam, 0 to 2 percent slopes, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
BkB2	Blount-Del Rey silt loams, 1 to 4 percent slopes, eroded (where drained)
Co	Coesse silt loam (where drained)
DeA	Del Rey-Blount silt loams, 0 to 1 percent slopes (where drained)
DkA	Digby silt loam, 0 to 2 percent slopes (where drained)
Ee	Eel silt loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
EoA	Eldean loam, 0 to 2 percent slopes
EoB2	Eldean loam, 0 to 6 percent slopes, eroded
EsB2	Eldean Variant silt loam, 2 to 6 percent slopes, eroded
GnB2	Glynwood silt loam, 2 to 5 percent slopes, eroded
GtA	Glynwood Variant silt loam, 0 to 2 percent slopes
HaA	Haney silt loam, 0 to 2 percent slopes
HbA	Haskins Variant loam, 0 to 2 percent slopes (where drained)
Mh	Milford silty clay loam (where drained)
Mk	Milford silty clay loam, stratified sandy substratum (where drained)
Mn	Millonove clay loam (where drained)
Mo	Millsdale silty clay loam (where drained)
MuB2	Morley loam, moderately slow perm, 2 to 5 percent slopes, eroded
Pg	Pella silty clay loam, till substratum (where drained)
Pk	Pella mucky silty clay loam, sandy substratum (where drained)
Pm	Fewamp silty clay loam (where drained)
RdA	Randolph silt loam, 0 to 2 percent slopes (where drained)
RLB	Pawson Variant fine sandy loam, 2 to 6 percent slopes

SOIL SURVEY WELLS COUNTY, INDIANA

PRIME FARMLAND--Continued

Map symbol	Soil name
Rr	Rensselaer loam (where drained)
Rz	Ross loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
Se	Saranac silty clay loam, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
Sp	Shoals loam, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
Sv	Sloan silty clay loam, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
TuB2	Tuscola loam, loamy substratum, 1 to 6 percent slopes, eroded
WsA	Whitaker silt loam, 1 to 2 percent slopes (where drained)

Approved: February 22, 1988

Gerald J. Post (acting)

RODNEY F. HARNER
National Leader
National Soil Survey
Quality Assurance Staff

CONVERSION LEGEND FOR
WELLS COUNTY, INDIANA
FEBRUARY 1988

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
Ac	An	FoC3	EpC3	Mu2	MuE	RoC2	R/C
Ah	An	FpC3	EpC3	MuE2	MuE	Rs	Rr
AkA	DeA	Gc	Rz	MvB2	MvC2	Ry	Rz
AkB	BkB2	Ge	Rz	MvC	MvC2	Rz	Rz
AkB2	BkB2	GnA	GtA	MvC2	MvC2	SbB2	MuB2
Am	An	GnB2	GnB2	MvD	MuE	Sd	Se
An	An	GpB3	GpB3	MvD2	MuE	Se	Se
ApA	DeA	GsB3	GpB3	MvE2	MuE	SgA	GtA
ApB2	BkB2	HaA	HaA	MxB3	GpB3	SgB	MuB2
BaaV	BdA	HbA	HbA	MxC3	MxC3	SgB2	MuB2
BaA	HaA	HbB2	HbA	MxD3	MuE	So	Sp
BaAV	BdA	HeE	MuE	Mz	Wad	Sp	Sp
BaB	EsB2	HeG	MuE	Mg	Co	Ss	DkA
BaB2	EoB2	HeG	MuE	OcA	EoA	St	Sv
BaB2	EsB2	HoA	DkA	OcB2	EoB2	Sv	Sv
BaC	EpC3	Hw	Wd	OgA	DkA	TrA	TuB2
BaC2	EpC3	Hx	Wda	Or	Ud	TrB	TuB2
BbA	HaA	KmA	HaA	OsA	EoA	TrB2	TuB2
BbB2	EsB2	KmB	EsB2	OsB	EoB2	TuA	TuB2
BcA	DeA	KmC	EpC3	OsBV	EsB2	TuB	TuB2
BcB	BkB2	KsA	HaA	OsC	EpC3	TuB2	TuB2
BcB2	BkB2	KsB	EsB2	Pd	Mk	Ud	Ud
BrA	EsB2	KsC	EpC3	Pe	Mh	W	W
BrB	EsB2	KsD	EpC3	Pe2	Mk	Wa	Wa
BrC	EpC3	Le	Mk	Pg	Pg	Wd	Wa
BrD	EpC3	MdA	TuB2	Pk	Pk	WsA	WsA
BAB2	EsB2	MdAV	BdA	Pm	Pm	Wt	Mn
DeA	DeA	MdB	TuB2	Po	Co	WWh	Co
DeB	BkB2	MdB2	TuB2	Ps	Ud	WZAV	WsA
DeB2	BkB2	MdC2	EpC3	Py	Fy	S	
Ed	Ee	MdD2	EpC3	PHh	Pg	W	W
Ee	Ee	MfA	TuB2	PQo	Co		
EoA	EoA	MfB	TuB2	RcB	RIB		
EoAv	EoA	MfB2	TuB2	RcC	R/C		
EoB	EoB2	Mm	Mh	RdA	RdA		
EoB2	EoB2	Mn	Mn	Re	Rr		
EpC3	EpC3	Mo	Mo	RoA	RIB		
FoA	EoA	Ms	Mh	RoB	RIB		
FoB2	EoB2	MsA	MsA	RoB2	RIB		
FoC2	EpC3	MsB2	MsA	RoC	R/C		

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

1. Data for which SCS-SOILS-8 forms have been prepared
Analysis by Purdue University

<u>Sampled as</u>	<u>Sample No.</u>	<u>Publication Map Symbol</u>	<u>Approved Classification</u>
Armiesburg	*S85IN179-1	An	Armiesburg taxadjunct (fine-loamy)
Belmore	*S85IN179-3	EsB2	Eldean Variant
Belmore Variant	*S85IN179-2	BdA	Belmore Variant
Digby	*S85IN179-4	DkA	Digby taxadjunct (fine)
Haney	*S85IN179-5	HaA	Haney taxadjunct (Typic)
Milford	*S85IN179-6	Mh	Milford
Millgrove	*S8IIN179-7	Mn	Millgrove taxadjunct (Haplaquoll)
Morley	*S84IN179-4	MvC2	Morley
Pella	S85IN179-9	Pg	Pella till substratum
Pella	*S85IN179-8	Pk	Pella sandy substratum
Shoals	*S84IN179-10	Sp	Shoals
Sloan	S85IN179-10	Sv	Sloan taxadjunct (fine-silty)
Tuscola till substratum	*S85IN179-11	TuB2	Tuscola
Whitaker	*S85IN179-12	WsA	Whitaker

2. Data for which SCS-SOILS-8 forms have been prepared
Analysis by NSSL

Blount	*S84IN179-1	DeA	Blount
Morley	S85IN179-6	MxC3	Morley
Patton	S84IN179-7	Mh	Milford
Pewamo	*S84IN179-8	Pm	Pewamo

*Typifying pedon of series for Wells County

3. Data for which SCS-SOILS-10 forms have been prepared
Analysis by IHWL

<u>Sampled as</u>	<u>Sample No.</u>	<u>Publication Map Symbol</u>	<u>Approved Classification</u>
Blount	*S84IN179-1	DeA	Blount
Del Rey	*S84IN179-2	DeA	Del Rey
Glynwood	*S84IN179-3	GnB2	Glynwood
Pewamo	*S84IN179-8	Pm	Pewamo

*Typifying pedon of series for Wells County

Notes to Accompany
Classification and Correlation
of the Soils of
Wells County, Indiana

by
Bill Hosteter and Steve R. Base

ARMIESBURG SERIES

This soil is a taxadjunct because it contains more sand in the control section than the series range. It is a fine-loamy, mixed, mesic Fluventic Hapludoll.

BELMORE VARIANT

This soil has formed in loamy outwash on terraces. It is a fine-loamy, mixed, mesic Typic Hapludoll.

COESSE SERIES

This soil contains less clay in the upper sediment and more clay in the lower sediment than defined for the series.

DIGBY SERIES

This soil is a taxadjunct because it contains more clay in the control section than the series range. It is a fine, mixed, mesic Aeric Ochraqualf. This soil also has a thicker silt mantle than recognized for the series.

EEL SERIES

A Bw horizon is recognized in this pedon which is outside the series range. The C horizon below a depth of 40 inches contains more gravel than the series range.

ELDEAN SERIES

Less than 60 percent of the gravel is limestone.

ELDEAN VARIANT

This soil formed in loamy outwash underlain with gravelly loamy and sandy sediments. This soil is not a source of sand and gravel as is the Eldean series. This soil classifies as clayey over loamy-skeletal, mixed, mesic Typic Hapludalfs.

GLYNWOOD VARIANT

This soil formed in glacial till which is more friable than the till in the rest of the county. It is on terrace-like landforms. It is a fine, mixed, mesic Typic Hapludalf.

HANEY SERIES

This soil is a taxadjunct because it does not have gray mottles in the upper 10 inches of the argillic horizon. The solum thickness and depth to carbonates are also greater than the series range. It is a fine-loamy, mixed, mesic Typic Hapludalf.

HASKINS VARIANT

This soil is considered to have less clay in the 2C horizon than defined for the series.

MILLGROVE SERIES

This soil is a taxadjunct because it does not have an argillic horizon. It classifies as a fine-loamy, mesic Typic Haplaquoll. The surface soil has more clay than the series range allows.

MILTON VARIANT

This soil formed in drift overlying limestone bedrock at depths less than 20 inches. It classifies as a clayey, mixed, mesic Lithic Arguidoll.

MORLEY SERIES

The MuB2 unit is on terrace-like landforms. The till is more friable and somewhat more permeable than the Morley units on till plains and moraines. Loamy outwash is below a depth of 6 to 10 feet.

RAWSON VARIANT

This soil contains less clay in the 2C horizon than defined for the series.

ROSS SERIES

This soil has a thicker solum than defined for the series.

SARANAC SERIES

The C horizon contains less clay than the series range.

TUSCOLA SERIES

This soil is more alkaline than defined for the series.

WHITAKER SERIES

This soil contains a little more clay in the upper part of the solum and is more alkaline in the lower part of the B horizon than defined for the series.

SOIL SURVEY WELLS COUNTY, INDIANA

CLASSIFICATION OF THE SOILS

(An asterisk in the first column indicates a taxadjunct to the series. See notes for a description of those characteristics of this taxadjunct that are outside the range of the series)

Soil name	Family or higher taxonomic class
*Armiesburg----	Fine-silty, mixed, mesic Fluventic Hapludolls
Belmore Variant.	Fine-loamy, mixed, mesic Typic Hapludolls
Blount-----	Fine, illitic, mesic Aeric Ochraqualfs
Coesse-----	Fine, mixed, nonacid, mesic Aeric Fluvaquents
Del Rey-----	Fine, illitic, mesic Aeric Ochraqualfs
*Digby-----	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Eel-----	Fine-loamy, mixed, nonacid, mesic Aquic Udfluvents
Eldean-----	Fine, mixed, mesic Typic Hapludalfs
Eldean Variant.	Clayey over loamy-skeletal, mixed, mesic Typic Hapludalfs
Glynwood-----	Fine, illitic, mesic Aquic Hapludalfs
Glynwood Variant.	Fine, illitic, mesic Typic Hapludalfs
*Haney-----	Fine-loamy, mixed, mesic Aquic Hapludalfs
Haskins Variant.	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Milford-----	Fine, mixed, mesic Typic Haplaquolls
*Millgrove----	Fine-loamy, mixed, mesic Typic Argiaquolls
Millsdale----	Fine, mixed, mesic Typic Argiaquolls
Milton Variant.	Fine, mixed, mesic Lithic Arciudolls
Morley-----	Fine, illitic, mesic Typic Hapludalfs
Pella-----	Fine-silty, mixed, mesic Typic Haplaquolls
Pewamo-----	Fine, mixed, mesic Typic Argiaquolls
Randolph-----	Fine, mixed, mesic Aeric Ochraqualfs
Rawson Variant.	Fine-loamy, mixed, mesic Typic Hapludalfs
Rensselaer----	Fine-loamy, mixed, mesic Typic Argiaquolls
Ross-----	Fine-loamy, mixed, mesic Cumulic Hapludolls
Saranac-----	Fine, mixed, mesic Fluvaquentic Haplaquolls
Shoals-----	Fine-loamy, mixed, nonacid, mesic Aeric Fluvaquents
Sloan-----	Fine-loamy, mixed, mesic Fluvaquentic Haplacuoolls
Tuscola-----	Fine-loamy, mixed, mesic Aquic Hapludalfs

SOIL SURVEY WELLS COUNTY, INDIANA

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Udorthents.	Loamy, mesic Udorthents
Wallkill-----	Fine-loamy, mixed, nonacid, mesic Thapto-Histic
	Fluvaquents
Whitaker-----	Fine-loamy, mixed, mesic Aerio Ochraqualfs